

NEW ZEALAND DIPLOMA IN WEB DEVELOPMENT AND DESIGN (LEVEL 5)

2019 START DATES:

28 JANUARY

4 MARCH

17 JUNE

26 AUGUST



**Computer
PowerPlus**
IT training specialists

Last Updated September 2018

Want to be a Web Developer in the exciting world of IT?

There's currently a shortage of trained IT professionals working in this area so chances of getting a job are good.

Web developers plan, produce and maintain websites using web programming languages, software applications, and databases.

Web developers usually earn an average of
\$45K-\$77K
per year

New Zealand Diploma in Web Development and Design (Level 5)

This programme provides a pathway to becoming an IT professional who can design and develop websites in all sectors of the economy and society.

On the completion of this programme, students will be able to build a complete web application following the entire web development process from end to end, using a web content management system.

In addition, graduates will have a broad set of IT skills that are internationally relevant. They will also be capable of operating within applicable professional standards and practice, both independently and collaboratively as part of a team.

After successful completion of this Diploma, students can choose to advance onto the NZ Diploma in Software Development (L6).

Duration:

34 weeks full-time + 6 weeks study break*

20 hours on campus/week + 15 hours/week home study

68 weeks part-time + 12 weeks study break*

10 hours on campus/week + 7.5 hours/week home study

2019 Fees

\$6,797 + \$500 Enrolment fee

International: \$17,088 + \$500 Enrolment fee (to be confirmed for 2019)

(This NZQA approved diploma qualifies for StudyLink Student Allowances and Loans)

PROGRAMME OVERVIEW

This Diploma is a 120 credit programme, consisting of eight x 15 credit courses.

Courses start every 5 weeks. The first 20 working days are the study days on the course. The last 5 days include a day each for revision and the final assessment, and holidays.



* Study breaks are taken between each course.

Campus Study Shifts

Morning: 7:30 am - 12:30 pm, Monday to Thursday

Afternoon: 1:00 pm - 6:00 pm, Monday to Thursday

Evening: 6:00 pm - 10:00 pm, Monday to Thursday*

Saturday: 8 am - 1 pm (9 am - 1 pm Auckland Campus)

Entry Requirements:

A minimum of 42 credits at NCEA Level 3, including 14 credits in Digital Technologies or Computing AND a minimum of 10 credits in Maths AND 10 credits in English at Level 2 or above, OR equivalent knowledge, skills and experience. [If you do not have the above NCEA Level 3 credits or equivalent computing-related qualification, you can take our online Skills and Knowledge Assessment.](#)

Contact us at info@cpp.ac.nz

Diploma learning outcomes:

Graduates will be able to:

- Determine client requirements, prepare and present solution(s) which meet client requirements.
- Write scripts appropriate to implement and customise a solution package using frameworks and libraries.
- Design and implement interfaces to enhance user experience and functionality.
- Select, install and configure appropriate plug-in modules to supplement functionality to meet organisational requirements.
- Test functionality and usability to meet client requirements.
- Implement, configure, and publish tested web solution to meet client requirements.

Core IT Skills:

- Apply the fundamentals of information systems concepts and practice to support and enhance organisational processes and systems.
- Apply the fundamentals of interaction design concepts and practice to enhance interface design.
- Apply the principles of software development to create simple working applications.
- Apply professional, legal, and ethical principles and practices in a socially responsible manner as an emerging IT professional.
- Apply communication, personal and interpersonal skills to enhance effectiveness in an IT role.
- Use problem-solving and decision-making techniques to provide innovative and timely Information Technology outcomes.

OUR APPROACH TO LEARNING AND TEACHING

The self-paced⁺ and blended-learning environment offered by Computer Power Plus allows you to take control of your own learning, while being supplemented with experienced tutor support.

The necessary on-site hardware/software and software for home computers are available for students to practise what they are learning. Students will also have workshop time to practise their skills.

As an applied programme of study, student learning is generated from learning guides, case studies and projects. Projects offer students the chance to conduct research, write reports or develop information technology components, and work both independently and in a workshop environment. Some assignments are completed in groups.

In addition to gaining specific discipline related knowledge and skills, the programme emphasises the development of transferable soft skills that are required for success in the workplace. These include ethical and professional conduct, self-confidence, communication, people skills and teamwork.

NEW ONLINE DELIVERY PLATFORM

Our courses will be delivered on a new and modern platform called iQualify.

This online platform has been optimised for delivery on desktop computers, tablets and smart phones, so you can continue your studies anywhere, or anytime.

iQualify allows students to carry on their studies exactly where they left off each time they login. Students can also create searchable study notes next to their course materials and share comments with other students. The platform also supports rich media content such as video and interactive quizzes.

⁺ Students can study at their own pace, but will be required to attend group activities at scheduled times and any final assessments are held in the fifth week of each course

* Christchurch Campus does not have a Thursday evening shift.

Course Descriptions

IT SYSTEMS (15 Credits)

Content

- Hardware concepts and components
- Software components and configuration
- Operating system concepts and configuration
- IT support concepts
- Systems security concepts and tools

Learning Outcomes:

1. Install and configure hardware and software components of computer architecture.
2. Configure a variety of operating systems.
3. Explain the hardware and software components of a network, including the Internet.
4. Apply the fundamentals of IT technical support concepts and practice to manage hardware and software resources to meet organisational and end user requirements.
5. Discuss a range of security concepts, tools and techniques.
6. Explain the hardware, software, and operating system components of a computer

Assessment:

	Weight	Pass Criteria*
Practical Tasks	20%	Achieved/Not achieved
Project	30%	50%
Final Assessment	50%	50%

DATA HANDLING AND WEB CONCEPTS

(15 Credits)

Content

- Data modelling
- Structured Query Language, to give students the skill and knowledge to use the basics of Microsoft SQL Server.
- Designing websites which gives an understanding of website design using HTML and CSS.

Learning Outcomes:

1. Apply the relational model of database design.
2. Employ a range of common SQL statements.
3. Analyse and solve data handling problems.
4. Design and build a website, using appropriate techniques, taking usability and communication into account.
5. Discuss the legal, ethical and security related issues surrounding gathering, storing, accessing and sharing information.
6. Test and reflect on the usability of a website focussing on its ability to communicate its content clearly.

Assessment:

	Weight	Pass Criteria*
Practical Assessment	10%	Achieved/Not achieved
Project	55%	50%
Final Assessment	35%	50%

PROFESSIONAL PRACTICE (15 Credits)

Content

- Legal and regulatory considerations relevant to IT
- Ethical decision-making; Ethical issues relevant to IT
- Professional conduct and codes of practice
- Personal effectiveness
- Information presentation techniques
- Business context of IT, information systems, initiation and management of IT projects.

Learning Outcomes:

1. Discuss legislation that relates to the Information Technology industry.
2. Explain the importance of ethical behaviour and evaluate the main ethical considerations facing Information Technology professionals.
3. Discuss the organisational context and impact of IT on business.
4. Apply information presentation skills.
5. Apply personal and interpersonal skills including, leadership, teamwork and relationship management.
6. Develop and propose a solution to meet a business need.
7. Understand role of information systems in an organisation and explain how they support organisational goals.

Assessment:

	Weight	Pass Criteria*
Practical Tasks	25%	50%
Project	30%	50%
Workshop	10%	50%
Final Assessment	35%	50%

Continued next page

PROGRAMMING PRINCIPLES (15 Credits)

Content

- Creating procedural and object oriented programs using Python.
- Mathematical and logical concepts underpinning programming.

Learning Outcomes:

1. Compare and contrast a range of design principles
2. Create, debug and test simple programs using fundamental programming constructs, principles and tools.
3. Work with both procedural and objected oriented methods.
4. Demonstrate understanding of the objectives, people involved, tasks and deliverables of each stage in the systems development life cycle.
5. Use a variety of number bases such as binary, decimal and hexadecimal

Assessment:

	Weight	Pass Criteria*
Project	50%	50%
Practical Assessment	20%	Achieved/Not achieved
Final Assessment	30%	50%

BUSINESS ANALYSIS AND SOLUTION DESIGN (15 Credits)

Content

- Business process modelling
- Elicitation techniques
- Stakeholder interaction
- Requirements analysis
- Solution design
- User interface design

Learning Outcomes:

1. Use business process modeling tools to understand and document business processes.
2. Interact with stakeholders
3. Analyse requirements to determine and meet client needs.
4. Apply solution design principles.
5. Discuss the security issues of a proposed solution.
6. Carry out a feasibility study.

Assessment:

	Weight	Pass Criteria*
Practical Assessment	70%	50%
Final Assessment	30%	50%

CLIENT-SIDE DEVELOPMENT (15 Credits)

Content

- Responsive design including user interface, HCI principles and universal accessibility
- Design principles
- Client side scripting / javascript
- Multimedia content development
- Use of frameworks or libraries

Learning Outcomes:

1. Implement responsive design considering independence of platform and device in use.
2. Apply user interface design principles and processes.
3. Implement a solution that takes user experience and accessibility into consideration.
4. Implement client-side web scripting to add interactivity to a website.
5. Apply client-side scripting standards.
6. Understand and implement multimedia optimisation techniques for mobile web.
7. Plan and perform simple unit testing and debugging.
8. Implement a solution using a framework or library.

Assessment:

	Weight	Pass Criteria*
Practical Assessment	20%	50%
Project	50%	50%
Written Assessment	30%	50%

TESTING & DEVELOPMENT OF A WEB APPLICATION (15 Credits)

Content

- Functional testing
- Usability testing
- Standards compliance testing
- Migration from development to live platform
- Testing on multiple platforms (devices and browsers)
- Client acceptance
- End-user/technical documentation and user training

Continued next page

* Students are required to pass each assessment to pass the course.

Learning Outcomes:

1. Create and use a test plan.
2. Test a solution on multiple platforms so that it meets user acceptance criteria
3. Understand the migration of a solution from development to testing environment to production
4. Produce technical and end user documentation
5. Describe a range of user training options
6. Create a web application using Django Content Management System (CMS)
7. Implement a solution that makes use of multiple plugins

Assessment:

	Weight	Pass Criteria*
Practical Assessment	15%	Achieved/Not Achieved
Project	50%	50%
Final Assessment	35%	50%

WEB APPLICATION PROJECT (15 Credits)

Content

- Systems development lifecycle
- Analysis, design, implementation, testing of a web application solution.

Learning Outcomes:

1. Investigate a range of pre-packaged solutions.
2. Interact with stakeholders and analyse requirements to determine client needs.
3. Design, develop and implement a web application solution.
4. Test a solution against requirements.
5. Create technical documentation for end users and technical staff.

Assessment:

	Weight	Pass Criteria*
Practical Assessment	100%	50%

Enrol today by making an appointment to see one of our friendly course advisors.

Phone us on 0508 48 48 84 or [click here to book an appointment online](#), or email us at info@cpp.ac.nz

Last Updated September 2018

ABOUT COMPUTER POWER PLUS

Computer Power Plus is owned by Whitireia New Zealand Limited and is jointly operated by Whitireia NZ and Wellington Institute of Technology (WelTec), two successful and highly regarded Institutes of Technology and Polytechnics in New Zealand.



With a history spanning almost 20 years, Computer Power Plus is one of New Zealand's leading providers of IT and professional skills training.

We have campuses in Auckland, Wellington and Christchurch with over 400 domestic and International students.

Thousands of our graduates are now working in rewarding IT careers here and abroad since 1996.

We offer all of our diploma programme graduates job placement support. They work alongside our experienced placement consultants who are dedicated to providing the tools and resources to support them to gain the ideal graduate position.

